PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 248/1 PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/IB2004/003257	International filing date *(day/month/year)* 12 August 2004 (12.08.2004)	Priority date *(day/month/year)* 12 August 2003 (12.08.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant EZRA, Lior, Ben		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 21 February 2006 (21.02.2006)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	Authorized officer Idhir Britel Telephone No. +41 22 338 70 60

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
BRUCE E. LILLING
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P.O. BOX 560
GOLDENS BRIDHE, NY 10526

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Applicant's or agent's file reference 248/1 PCT	Date of mailing (*day/month/year*) 26 AUG 2005 FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date (*day/month/year*)	Priority date (*day/month/year*)
PCT/IB04/03257	12 August 2004 (12.08.2004)	12 August 2003 (12.08.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): G01N 25/00; G01K 7/00 and US Cl.: 374/54, 185, 148; 604/76; 73/204.25

Applicant

EZRA, LIOR BEN

1. This opinion contains indications relating to the following items:

- ☒ Box No. I — Basis of the opinion
- ☐ Box No. II — Priority
- ☐ Box No. III — Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV — Lack of unity of invention
- ☒ Box No. V — Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI — Certain documents cited
- ☒ Box No. VII — Certain defects in the international application
- ☐ Box No. VIII — Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(*b*) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer for Diego Gutierrez Telephone No. 571-272-2247

Form PCT/ISA/237 (cover sheet) (January 2004)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IB04/03257

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IB04/03257

Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 2, 3, 9, 10 and 12	YES
	Claims 1, 4-8, 11	NO
Inventive step (IS)	Claims NONE	YES
	Claims 1-12	NO
Industrial applicability (IA)	Claims 1-12	YES
	Claims NONE	NO

2. Citations and explanations:

Please See Continuation Sheet

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IB04/03257

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 4-6 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof:
There is lack of antecedent basis in claim 4 for "the CPU and /or display unit" in line 3.
Claims 5 and 6 are objected to for being dependent on objected base claim 4.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/IB04/03257

Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

1. Claims 1, 4-8, and 11 lack novelty under PCT Article 33(2) as being anticipated by WO 01/54488 to Lowe et al [hereinafter Lowe].

Lowe discloses an apparatus for determining the amount of human milk supplied to a baby during a feeding session, the apparatus including:

a nipple shield adapted to be mounted on the nipple region of a breast of a mother and having an outlet through which the milk can pass to the baby;

a tube through which milk passes through to the baby; and

a thermal dilution gauge mounted on the shield to measure the amount of milk passing through the tube;

wherein the shield is made of isoprene rubber; the gauge is connected to is connected to a display unit via a data communication cable; and the display unit includes switches for displaying the amount of milk produced or consumed; and the shield substantially as described in the applicant's diagrams (see figure 1, page 2, lines 11-12; and page 3, lines 3-6).

2. Claim 2 lacks an inventive step under PCT Article 33(3) as being obvious over Lowe in view of U.S. Patent 4,680,028 to Stuart.

Lowe discloses an apparatus having all of the limitations of claim 2, as stated above in paragraph 1, except for the material of the shield being silicon rubber.

Stuart discloses a nipple shield for a breast pump to supply milk to a baby. The material of the shield is preferable silicone rubber since it is flexible and can be exposed to high temperature and pressure for disinfecting, i.e., autoclaved.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the shield of Lowe by making the shield of silicon rubber, as taught by Stuart, in order to provide a material that will allow the shield to be flexible over the breast and can be disinfected in an autoclave.

3. Claims 3, 9, 10, and 12 lack an inventive step under PCT Article 33(3) as being obvious over Lowe in view of EP 0285451 to Tanaka et al [hereinafter Tanaka].

Lowe discloses an apparatus having all of the limitations of claim 3, 9, 10, and 12, as stated above in paragraph 1, except for the gauge including a heater and two resistive temperature detectors that can be mounted outside or inside the tube as one chip.

Tanaka discloses a thermal gauge for measuring the amount of a fluid, the gauge including a heater and two resistive temperature detectors that can be mounted outside or inside a tube as one chip, the gauge being useful since it can be mass-produces with uniform sensor characteristics and can attain stabilized operation.

Referring to claim 3, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the shield of Lowe by replacing the gauge with a gauge as taught by Tanaka, in order to provide a, as taught by Stuart, in order to provide a gauge that can be mass-produces with uniform sensor characteristics and can attain stabilized operation.

Furthermore, referring to claims 9, 10, and 12, the apparatus of Lowe and Tanaka results in an apparatus, gauge, and a

Supplemental Box
In case the space in any of the preceding boxes is not sufficient.

method of determining the amount of milk substantially as described in the applicant's diagrams.

4. Claims 1-12 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.